

SUMMARY SHEET

I. Description of Item

Resolution to approve the purchase of a HP NonStop Virtual Tape solution from Venture Technologies, Inc. for the purpose of replacing the obsolete physical tape backup system currently in use on the HP NonStop systems. This resolution requires expenditure of funds in the amount of \$195,423.62 from FY 2009-2010 Capital Improvement project 909-201871-7077, Computer Equipment.

Shelby County's current physical tape backup and recovery strategy is suffering from long backup windows, high FTE labor requirements, large tape storage space requirements and media reliability issues. With the requirements of 24 x 7 operations and the need for near-instantaneous recovery of critical data, the existing backup systems are no longer adequate to meet the growing needs of Shelby County Government. In order to improve the backup and recovery capabilities while reducing the over all costs for mission critical applications such as Motor Vehicle Registration (MVR), Jail Management System (JMS), Justice Support System (JSS) and Business Tax and Child Support applications a HP NonStop Virtual Tape Solution is needed.

To address these issues, the Information Technical Support group submitted RFP 10-010-25 HP NonStop Virtual Tape Solution to replace the existing tape based backup and recovery system.

2. Proposed Solution:

RFP 10-010-25 was issued to receive pricing to upgrade and replace the existing physical tape backup system with a Virtual Tape emulation solution directly connected to a Data Deduplication capable storage system. To validate this design, a proof of concept was conducted from September 26 2009 to October 03, 2009 on the HP NonStop system located in the 10th floor data center at 160 N. Main St. A variety of tests were conducted using actual HP NonStop data that is being backed up via the legacy tape system. Below outlines the tests and comparative results:

Backup Speed: (Typical Weekly Production Backup – SC45, SC44, SC40)

- **Virtual Tape solution (1) single virtual tape device - 3 hrs to complete (Unattended) vs. 18 hrs and at least the involvement of 2 shifts of operators.**
- **In this test, all three production systems were backed up with a time of reduction of 83%. No Operators were required.**

Backup data Storage and compression

| | Pre-Comp (GiB) | Post-Comp (GiB) | Global-Comp Factor | Local-Comp Factor | Total-Comp Factor (Reduction %) |
|------------------------|-------------------|--------------------|-----------------------|----------------------|---------------------------------------|
| ----- | ----- | ----- | ----- | ----- | ----- |
| Currently Used: | 1067.8 | 84.0 | - | - | 12.7x |
| Written:* | | | | | (92.1) |
| Last 7 days | 533.8 | 16.9 | 9.3x | 3.4x | 31.6x |
| Last 24 hrs | 288.2 | 6.8 | 13.0x | 3.3x | 42.7x |
| ----- | ----- | ----- | ----- | ----- | ----- |

To summarize, over 1 Tb of data was stored in 84 GB of disk space. In comparison, performing the same backup of the three (3) productions systems would require multiple manual tape changes and FTE monitoring for media errors during the typical 18 hour window.

To further describe the risks with the legacy system, in the event of a media failure or tape device failure 13 hours into the process, the entire backup would be lost. As there would not be enough time to restart the backup within the 24 hour window.

The implementation of the Virtual Tape Solution would result in a cost savings by eliminating manual task requirements needed to support the legacy tape system. Tasks include:

- Mounting of physical tapes during the backup window
- Transportation of physical media between the east and west campuses.
- Management of physical tape inventory

II. Source and Amount of Funding

A. Amount Expended

Expenditures on this contract would total \$195,423.62 from the 2009-2010 CIP budget account 909-201871-7077.

B. All Costs (Direct/Indirect):

| | |
|-------------------------------------------------------|----------------------------|
| FY 2009-2010 (Equipment and Software purchase) | \$195,423.62 |
| Data Domain (2) DD610 | |
| ETI – Net Back Box – Prod S7616 (160 N. Main) | |
| ETI – Net Back Box – Prod S7406 (Recovery Site) | |
| Hardware and Software support | |
| FY 2010-2011 - Hardware/Software support | \$ 20,391.79 |
| FY 2011-2012 - Hardware/Software support | \$ 20,391.79 |
| FY 2012-2013 - Hardware/Software support | \$ 21,233.79 |
| FY 2013-2014 - Hardware/Software support | <u>\$ 21,680.05</u> |
| Total (5 year period) | \$279,121.04 |

III. Contract Items

A. Type of Contract:

The Contract specifies the proposed purchase of a HP NonStop Virtual Tape solution and 5 years maintenance in the total amount of \$279,121.04. This amount is based on a 5-yr contract.

B. Term:

The term of this contract is from the date the contract is signed and is based on 5 year period.

IV. Additional Information Relevant to Approval of this Item

The County's current physical HP NonStop tape backup system is extremely labor intensive, and is approaching being unusable. As data increases on these systems the required backup time increases as well. Without a proactive approach to this issue, the legacy tape drive based backup window will eventually exceed 24hrs. In addition, if a failure of either tape media or physical tape drive occurs, the entire backup for that time period is in jeopardy, as there will not be enough time to restart and complete the necessary backups.

ITEM NO: _____

PREPARED BY: Joe Presley

APPROVED BY: Lisa Kelly

RESOLUTION TO PURCHASE HP NONSTOP VIRTUAL TAPE SOLUTION FROM VENTURE TECHNOLOGIES, INC. IN THE AMOUNT OF \$195,423.62 AND THIS ITEM REQUIRES EXPENDITURE OF FUNDS IN THE AMOUNT OF \$195,423.62 FROM FY 2009-2010 CAPITAL IMPROVEMNET PROJECT 909-201871-7077, COMPUTER EQUIPMENT. SPONSORED BY COMMISSIONER J.W.GIBSON.

WHEREAS, The Information Technology Department has a need to purchase a Virtual Tape Solution to support Shelby County Government's HP NonStop based applications and business functions to replace the current physical tape backup system; and

WHEREAS, A Request for Proposals (RFP #10-010-25) for the purchase of the solution was published on the Shelby County Web Site and issued via regular mail to thirteen (13) vendors; and

WHEREAS, Venture Technologies, Inc submitted the lowest and best bid; and

WHEREAS, The administration is now requesting approval of \$195,423.62 from the FY2009-2010 CIP Project 909-201871-7077, Computer Equipment to purchase equipment and technical support for same; and

WHEREAS, Funds in the amount of \$195,423.62 are currently available in FY2009-2010 CIP Project 909-201871-7077; and

WHEREAS, The total projected expenditure for this purchase over the next five (5) year period for equipment maintenance and software support, is \$279,121.04; and

WHEREAS, The TCO has reviewed and recommends this project.

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF COMMISSIONERS OF SHELBY COUNTY, TENNESSEE, That the contract with Venture Technologies, Inc in the amount of \$195,423.62 is hereby approved and appropriated from FY2009-2010 CIP Project 909-201871-7077; Computer Equipment.

BE IT FURTHER RESOLVED, That the County Mayor and the Director of Administration and Finance are authorized to issue their warrant or warrants in amounts \$195,423.62 to Venture Technologies, Inc for the purposes contained in this Resolution, and to take proper credit in their accounting therefore.

BE IT FURTHER RESOLVED, That the additional renewal Amendments for this contract are hereby approved subject to the annual appropriation of funds for each renewal term's corresponding Fiscal Operating Year by Shelby County Government. In the event sufficient funds for said Amendments are not appropriated by the Board of Commissioners for the fiscal periods relating to any new renewal term, then the Amendment will be terminated.

BE IT FURTHER RESOLVED, That the County Mayor is hereby authorized to execute any and all documents to effectuate the intent of this Resolution on behalf of Shelby County Government and executed copies shall placed on file in the Purchasing Department.

BE IT FURTHER RESOLVED, That this Resolution shall take effect from and after the date it shall have been enacted according to due process of law, the public welfare requiring it.

Joe Ford, Interim County Mayor

Date: _____

ATTEST:

Clerk of County Commission

ADOPTED: _____